

PATENT COOPERATION TREATY

From the INTERNATIONAL PRELIMINARY EXAMINING AUTHORITY

TO:
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PCT
NOTIFICATION OF TRANSMITTAL OF INTERNATIONAL
PRELIMINARY REPORT ON PATENTABILITY
(PCT Rule 71.1)

Date of mailing
(day/month/year) 07/06/2006

Applicant's or agent's file reference
03PA0145 PCT

IMPORTANT NOTIFICATION

International application no.
PCT/EP2005/000621

International filing date
(day/month/year)
22/01/2005

Priority date (day/month/year)
17/02/2004

Applicant
CARL FREUDENBERG KG et al.

1. The applicant is hereby notified that this International Preliminary Examining Authority transmits herewith the international preliminary report on patentability and its annexes, if any, established on the international application.

2. A copy of the report and its annexes, if any, is being transmitted to the International Bureau for communication to all the elected Offices.

3. Where required by any of the elected Offices, the International Bureau will prepare an English translation of the report (but not of any annexes) and will transmit such translation to those Offices.

4. REMINDER

The applicant must enter the national phase before each elected Office by performing certain acts (filing translation and paying national fees) within 30 months from the priority date (or later in some Offices) (Article 39 (1)) (see also the reminder sent by the International Bureau with Form PCT/IB/301).

Where a translation of the international application must be furnished to an elected Office, that translation must contain a translation of any annexes to the international preliminary report on patentability. It is the applicant's responsibility to prepare and furnish such translation directly to each elected Office concerned.

For further detail on the applicable time limits and requirements of the elected Offices, see Volume II of the PCT Applicant's Guide.

The applicant's attention is drawn to Article 33(5), which provides that the criteria of novelty, inventive step and industrial applicability described in Article 33(2) to (4) merely serve the purposes of international preliminary examination and that "any Contracting State may apply additional or different criteria for the purposes of deciding whether, in that State, the claimed invention is patentable or not" (see also Article 27(5)). Such additional criteria may relate, for example, to exemptions from patentability, requirements for enabling disclosure, clarity and support for the claims.

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INTERNATIONAL PATENT COOPERATION TREATY

PCT

PRELIMINARY INTERNATIONAL PATENTABILITY EXAMINATION REPORT

(Chapter II of the International Patent Cooperation Treaty)

File No. of Applicant or Attorney 03PA0145 PCT	FURTHER PROCEDURE <div style="text-align: right; font-size: small;">see Form PCT/IPEA/416</div>	
International File Number PCT/EP2005/000621	Intern. Appl. Date (<i>month, day, year</i>) 01/22/2005	Priority Date (<i>month, day, year</i>) 02/17/2004
International Patent Classification (IPC) or National Classification and IPC INV. H01B7/08 H01B13/012 B60R 16/02		
Applicant: CARL FREUDENBERG KG et al.		

1. This report is the preliminary international examination report, which was prepared by the authority commissioned with the preliminary international examination in accordance with Section 35 and is forwarded to the applicant in accordance with Section 36.

2. This REPORT comprises a total of 5 pages, including this cover sheet.

3. Additionally the report includes ATTACHMENTS; these attachments comprise

a. ☒ (*sent to the applicant and the international office*) a total of 1 pages, which are

☒ pages with the specification, claims and/or drawings that were modified and on which this report is based, and/or pages with corrections made by this authority (see Rule 70.16 and Section 607 of the Administrative Guidelines).

☐ pages that replace previous pages, however which for reasons stated in Field No. 1, Item 4 and in the additional field in the opinion of the authority contain a modification that exceeds the disclosure content of the international application in the originally submitted form.

b. ☐ (*sent only to the international office*) a total of (please indicate type and quantity of the electronic data medium/media) containing a sequence protocol and/or the corresponding tables, only in computer-legible form, as stated in the additional field relating to the sequence protocol (see Section 802 of the Administrative Guidelines).

4. This report contains information on the following issues:

☒ Field No. I Basis of the Report

☐ Field No. II Priority

☐ Field No. III No evaluation has been prepared on novelty, inventive creativity and commercial applicability.

☐ Field No. IV Lacking uniformity of invention

☒ Field No. V Justified observation in accordance with Section 35(2) regarding novelty, inventive step and industrial applicability; documents and declarations to support this observation.

☒ Field No. VI Certain documents as indicated

☐ Field No. VII Certain deficiencies of the international application

☒ Field No. VIII Certain remarks regarding the international application

Date Application was submitted 10/21/2005	Date on which Report was prepared 07/06/2006
Name and Mailing Address of Authority Commissioned with International Examination <div style="margin-left: 20px;"> European Patent Office – P.B. 5818 Patentlaan 2 (logo) NL-2280 HV Rijswijk – Pays Bas Phone +31 70 340 – 2040 Tx: 31 651 epo nl Fax: +31 70 340 - 3016 </div>	Authorized Officer <div style="margin-left: 20px;"> Salm, R. Tel: +31 70 340-2692 <div style="text-align: right;">(logo)</div> </div>

Field No. I	Basis of the Report
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1. Regarding the **language**, the report is based on the international application in the language it was submitted, unless stated otherwise here.

☒ The report is based on a translation from the original language into the following language, which is the language of the translation that was submitted for the following purpose:
☐ international search (according to Rules 12.3 and 23.1 b))
☐ publication of the international application (according to Rule 12.4)
☐ preliminary international examination (according to Rules 55.2 and/or 55.3)
2. Regarding the **components*** of the international application, the report is based on *(replacement pages, which were presented to the application office upon request in accordance with Section 14, are considered as having been "originally submitted" within the framework of this report and have not been attached)*:

Description, Pages

1-8 in the originally submitted version

Claims, No.

2-10 in the originally submitted version
1 received on 12/16/2005 with the letter dated 12/16/2005

Drawings, Pages

1/1 in the originally submitted version

☐ in a sequence protocol and/or possible corresponding tables – see additional field relating to the sequence protocol

3. ☐ Due to modifications, the following documents have been eliminated.
☐ specification: page
☐ claims: no.
☐ drawings: page/fig.
☐ sequence protocol (*detailed information*):
☐ possible tables belonging to the sequence protocol (*detailed information*):
4. ☐ This report has been prepared without consideration of (some) modifications attached to this report and listed in the following since for the reasons stated in the additional field in the opinion of the authority they exceed the disclosure content of the originally submitted version (Rule 70.2 c)).
☐ specification: page
☐ claims: no.
☐ drawings: page/fig.
☐ sequence protocol (*detailed information*):
☐ possible tables belonging to the sequence protocol (*detailed information*):

** If Item 4 applies, some or all of these pages can be provided with the remark "replaced".*

Field No. V Justified observation in accordance with Section 35 (2) regarding novelty, inventive creativity and commercial applicability; documents and declarations to support this observation.

- | | | | |
|----|---|-------------|------|
| 1. | Observation | | |
| | Novelty (N) | Yes: Claims | 1-10 |
| | | No: Claims | |
| | Inventive Step (IS) | Yes: Claims | 1-10 |
| | | No: Claims | |
| | Industrial Applicability (IA) | Yes: Claims | 1-10 |
| | | No: Claims | |
| 2. | Documents and Declarations (Rule 70.7): | | |
| | see attachment | | |

Field No. VIII Certain remarks regarding the international application

The following should be noted regarding the clarity of the claims, the description and the drawings or regarding the question of whether the claims are fully supported by the description:

see attachment

Regarding Item V

Justified observation regarding novelty, inventive creativity and industrial applicability; documents and declarations to support this observation.

1. The applicant cited the following document (D3) in the description. The numbering also applies to the remainder of the proceedings:

D3: DE 196 28 850 A (YAZAKI CORP.) January 23, 1997

2. INDEPENDENT CLAIM 1

Document D3 is considered the closest state of the art compared to the object of claim 1. It discloses (the references in brackets relate to this document):

A three-dimensional flat cable made of a laminate, which comprises a conductor layer (12) that is bonded between a cover layer (B) and a support layer (A), wherein at least one adhesive layer (C) is provided to connect the layers.

The object of claim 1 therefore differs from the known flat cables in that the flat cable is fixed in its three-dimensional shape following or during the forming of the laminate while applying heat, radiation and pressure by cooling the adhesive layer to below the glass temperature T_g or by reactive hardening of the adhesive layer.

The object of claim 1 is therefore novel (Article 33(2) PCT).

The task to be achieved with the present invention can therefore be viewed as creating a three-dimensional flat cable with a few steps.

While the solution proposed for this task in claim 1 of the present application in its present form (see item VIII) is not clear, it is based on inventive step for the

following reasons (Article 33(3) PCT) because no indications exists in the related art regarding this solution).

3 DEPENDENT CLAIMS 2-10

Claims 2-10 are dependent on claim 1 and therefore likewise meet the PCT requirements in terms of novelty and inventive step.

4 INDUSTRIAL APPLICABILITY

The application relates to a method for producing a flat cable for vehicles, so that the requirements of Article 33(4) relating to industrial applicability are met.

Regarding Item VIII

As will be demonstrated below, some of the characteristics in the device-related claim 1 relate to a method for producing a device and not to the definition of the device based on its characteristic features. The intended limitations, contradictory to the requirements of PCT Article 6, are therefore not clearly disclosed in the claim.

It is clear from the description on page 2, line 24 that the flat cable is formed by applying heat and pressure (not and/or).

New Claim 1

1. A three-dimensional flat cable made of a laminate, which comprises a conductor layer that is bonded between a cover layer and a support layer, at least one adhesive layer being provided to connect the layers, characterized in that the flat cable following or during the forming of the laminate is fixed in its three-dimensional shape by applying heat, radiation and/or pressure by cooling the adhesive layer to below the glass temperature T_g or by reactive hardening of the adhesive layer.